AMENDMENTS TO THE SPECIFICATION

Please replace the title with the following amended title:

-- ~~OPTICAL CHARACTERISTIC MEASURING INSTRUMENT AND METHOD, PROGRAM, AND RECORD MEDIUM ON WHICH THE PROGRAM IS RECORDED~~ APPARATUS AND METHOD FOR MEASURING AN OPTICAL CHARACTERISTIC WITHOUT ADVERSE EFFECTS OF A DEVIATION OF A POLARIZED COMPONENT --.

Please replace the "DISCLOSURE OF THE INVENTION" section of the specification (beginning at page 5, line 21 and ending at page 9, line 28) with the following:

-- DISCLOSURE OF THE INVENTION

According to the present invention ~~as described in claim 1~~, an optical characteristic measuring instrument that measures an optical characteristic of a device under test, includes: a polarization separating unit that receives light having emitted from the device under test, separates the received light into p-polarized light and s-polarized light, and outputs the p-polarized light and s-polarized light; a light generating unit that generates incident light; an optical modulation unit that applies intensity modulation to the incident light, and emits modulated light; a light input unit that makes the incident light which has undergone the intensity modulation incident on the device under test wherein the incident light is coincident with a p-polarization axis and an s-polarization axis of the polarization separating unit; a first measuring unit that measures a phase shift equivalent value and an amplitude equivalent value of the incident light based upon the

output from the polarization separating unit; a second measuring unit that measures a phase shift equivalent value of the incident light based upon the light emitted from the device under test; and an optical characteristic measuring unit that measures the optical characteristic of the device under test based upon the measured results by the first measuring unit and the second measuring unit.

According to the optical characteristic measuring instrument configured as described above, the second measuring unit measures the phase shift equivalent value of the incident light based upon the light emitted from the device under test. The optical characteristic measuring unit measures the optical characteristic of the device under test based upon the measured result by the second measuring unit. Thus, even if there is a deviation on the p-polarization axis or the s-polarization axis in the amplitude equivalent value measured by the first measuring unit, since the optical characteristic of the device under test is measured based upon the measured result by the second measuring unit, and it is thus possible to prevent adverse influence upon the measurement of the optical characteristic due to the deviation of the polarization component.

~~The present invention as described in claim 2, is the optical characteristic measuring instrument according to claim 1, wherein the~~ The optical characteristic measuring unit measures the optical characteristic of the device under test based upon the measured result by the second measuring unit if a p-polarization component of the amplitude equivalent value of the incident light measured by the first measuring unit being excessively large or excessively small compared with that of an s-polarization component thereof.

~~The present invention as described in claim 3, is the optical characteristic measuring instrument according to claim 1 or 2, wherein the~~ The phase shift equivalent value is obtained by differentiating a phase shift by an optical angular frequency.

~~The present invention as described in claim 4, is the optical characteristic measuring instrument according to claim 1 or 2, wherein the~~ The amplitude equivalent value is the square of an amplitude.

~~The present invention as described in claim 5, is the optical characteristic measuring instrument according to claim 3, wherein a~~ A group delay time measuring unit ~~that~~ measures a group delay time of the device under test based upon the measured result by the second measuring unit.

According to the present invention ~~as described in claim 6~~, an optical characteristic measuring method for measuring an optical characteristic of a device under test, includes: a polarization separating step of receiving light having emitted from the device under test, separating the received light into p-polarized light and s-polarized light, and outputting the p-polarized light and s-polarized light; a light generating step of generating incident light; an optical modulation step of applying intensity modulation to the incident light, and emitting modulated light; a light input step of making the incident light which has undergone the intensity modulation incident on the device under test wherein the incident light is coincident with a p-polarization axis and an s-polarization axis of the polarization separating step; a first measuring step of measuring a phase shift

equivalent value and an amplitude equivalent value of the incident light based upon the output of the polarization separating step; a second measuring step of measuring a phase shift equivalent value of the incident light based upon the light emitted from the device under test; and an optical characteristic measuring step of measuring the optical characteristic of the device under test based upon the measured results by the first measuring step and the second measuring step.

According to the ~~The~~ present invention ~~as described in claim 7~~, there is a program of instructions for execution by the computer to perform an optical characteristic measuring process of an optical characteristic measuring instrument that measures an optical characteristic of a device under test, having: a polarization separating unit that receives light having emitted from the device under test, separates the received light into p-polarized light and s-polarized light, and outputs the p-polarized light and s-polarized light; a light generating unit that generates incident light; an optical modulation unit that applies intensity modulation to the incident light, and emits modulated light; and a light input unit that makes the incident light which has undergone the intensity modulation incident on the device under test wherein the incident light is coincident with a p-polarization axis and an s-polarization axis of the polarization separating unit; the optical characteristic measuring process including: a first measuring step of measuring a phase shift equivalent value and an amplitude equivalent value of the incident light based upon the output of the polarization separating step; a second measuring step of measuring a phase shift equivalent value of the incident light based upon the light emitted from the device under test; and an optical characteristic measuring step of measuring the optical characteristic of the device under test based upon the measured results by the first

measuring step and the second measuring step.

According to the ~~The~~ present invention ~~as described in claim 8,~~ there is a computer-readable medium having a program of instructions for execution by the computer to perform an optical characteristic measuring process of an optical characteristic measuring instrument that measures an optical characteristic of a device under test, having: a polarization separating unit that receives light having emitted from the device under test, separates the received light into p-polarized light and s-polarized light, and outputs the p-polarized light and s-polarized light; a light generating unit that generates incident light; an optical modulation unit that applies intensity modulation to the incident light, and emits modulated light; and a light input unit that makes the incident light which has undergone the intensity modulation incident on the device under test wherein the incident light is coincident with a p-polarization axis and an s-polarization axis of the polarization separating unit; the optical characteristic measuring process including: a first measuring step of measuring a phase shift equivalent value and an amplitude equivalent value of the incident light based upon the output of the polarization separating step; a second measuring step of measuring a phase shift equivalent value of the incident light based upon the light emitted from the device under test; and an optical characteristic measuring step of measuring the optical characteristic of the device under test based upon the measured results by the first measuring step and the second measuring step. --

Please replace the abstract with the following amended abstract:

-- The adverse effect of the deviation of a polarized component on measurement of an optical characteristic is prevented. A second measuring section ~~(25)~~ determines group delay times ~~(τ_{pg}, τ_{sg})~~ of the incident light entering an optical fiber ~~(18)~~ from the exit light emerging from the optical fiber ~~(18)~~. If there is any deviation along the p- or s-polarization axis of the amplitude equivalent value (power) measured by a first measuring section ~~(24) (namely, $T_{11}^2 << T_{21}^2$, $T_{11}^2 >> T_{21}^2$, $T_{12}^2 << T_{22}^2$, $T_{12}^2 >> T_{22}^2$)~~, an optical characteristic measuring section ~~(26)~~ determines group delay times ~~(τ_{11}, τ_{21}, τ_{12}, τ_{22})~~ from the components of the transfer function of the optical fiber ~~(18)~~. Therefore, even if there is any deviation along the p- or s-polarization axis of the amplitude equivalent value (power) measured by the first measuring section ~~(24)~~, the group delay times are determined on the basis of the results of measurement (not influenced by the deviation along the p- or s-polarization axis of the power) by the second measuring section ~~(25)~~. ~~As a result, the adverse effect of the deviation of a polarized component on measurement of an optical characteristic is prevented.~~ --